

**DRAFT ENVIRONMENTAL IMPACT REPORT
FOR GENERAL WASTE DISCHARGE REQUIREMENTS
FOR IRRIGATED LANDS IN THE SCOTT RIVER AND SHASTA RIVER
WATERSHEDS**

Attachment B-Attachment E

ATTACHMENT B: Management Practices

Typical Construction, Operation, and Maintenance Processes for Selected Generalized Reasonably Foreseeable Management Practices

The number of reasonably foreseeable management practices listed in the prior table is too great to provide detailed information regarding typical construction/installation, operation, and maintenance processes for each one. Additionally, many of the practices listed (e.g., apply less fertilizer, apply pesticides in accordance with label instructions, less tillage, etc.) would have limited potential to result in significant adverse environmental impacts. Therefore, a selected number of generalized reasonably foreseeable management practices with the greatest potential for environmental impacts associated with their construction, operation, and/or maintenance is presented here.

Efficient Irrigation Systems

This generalized management practice category includes drip irrigation, micro-irrigation, or similar irrigation systems that are installed to increase efficiency and reduce irrigation runoff. Such irrigation systems typically include a delivery system (e.g., center pivot and smaller-diameter drip lines that may be polyethylene), filters (e.g., media, screen, and disk filters, or settling ponds), pressure regulators, valves or gauges, chemical injectors (if chemigation or fertigation is employed), and controllers. Installation could include some excavation and/or trenching, transport and delivery of irrigation system materials, and potentially off-haul of soil or construction waste materials. Operation of the efficient irrigation system may use energy (i.e., electricity) for filtration systems and pressure regulation. Maintenance activities may include periodic replacement of filters and/or drip lines, including disposal of used materials.

Runoff Management Features (e.g., Buffer Strip, Vegetated Filter Strip, or Swale)

Runoff management features may include buffer strips, vegetated filter strips, or swales, all of which serve to manage runoff through vegetation that absorbs and filters water and sediments. These features usually include sloped areas of planted vegetation positioned between a waterbody receiving runoff and pollutant source area. Construction/installation activities could include light disking, use of a “no till” or grass drill for seeding the proposed vegetated area, and associated transport of materials and equipment. Minor excavation and off-haul of soils may be required for construction of swales. General vegetation management (e.g., mowing, weeding, etc.) may be required for periodic maintenance of the facilities. Generally, these types of runoff management features would not use or require energy, other than for operation of any equipment used in maintenance activities.

Tailwater Retention/Detention Basins

Tailwater retention/detention basins are constructed from an embankment or excavation temporally store the excess irrigation water and so that the excess water can be recovered/reused, discharged after cooling, or infiltrated to groundwater.. Tailwater retention/detention basins typically are constructed with an engineered outlet. Heavy equipment is required for construction of sediment retention basins, such as dozers, hydraulic excavators, trenchers, dump trucks, scrapers, etc. Engineered fill material may need to be imported to the site for construction of the embankment, and/or excavated material may need spread onsite. Maintenance activities include periodic inspections of the basin, removal of accumulated sediment, debris/trash removal, replacement of damaged parts, and vegetation management.

Riparian Buffer Areas

Riparian buffer areas are communities of perennial vegetation including trees, shrubs, and grasses adjacent to a body of water that provide important habitat and water quality functions, including passive removal of pollutants (e.g., sediment, pesticides, etc.) and temperature regulation through shading. Depending on the existing vegetation/ground cover in the targeted area, construction of the riparian buffer area may include removal of existing vines, light disking, and broadcast seeding or plug planting of riparian vegetation species. Equipment used during construction could include a “no till” or grass drill, skidsteer loader, and trucks for transport of materials. Following construction/installation, riparian buffer areas may require some watering, particularly in the early plant stages to ensure survival, but otherwise would not use substantial water or energy. Maintenance activities may include periodic inspections of streambank stability/evidence of erosion, exclusion of livestock, and general vegetation management.

Reasonably Foreseeable Management Practices as Determined from Available Literature

Practices to Reduce Nutrient Loading to Surface Water and Groundwater

- Reduce/eliminate irrigation discharge.
- Reduce/eliminate stormwater discharge.
- Plant cover crops; use them and manage them appropriately (e.g., not applying fertilizer to them).
- Manage irrigation, examples include:
 - Irrigation distribution uniformity.
 - Reduce irrigation water applied.
 - Use micro-irrigation.
 - Maintain irrigation system; check for leaks and broken emitters, and fix/replace as needed.
- Install buffer strip, vegetated filter strip, or swale.
- Install constructed wetlands or other vegetated treatment system.
- Install backflow prevention devices.
- Apply less fertilizer.

- Test water in wells to determine nutrient concentration before irrigating and fertilizing and reduce fertilizer application based on irrigation water nutrient concentration and volume to be applied.
- Install appropriate storage of fertilizers, if kept on site.
- Develop a nutrient management plan.
- Apply nutrients at rates necessary to achieve realistic crop yields.
- Improve timing of nutrient application.
- Use agronomic crop production technology to increase nutrient use efficiency.
- Avoid winter nitrogen applications.
- Plan timing of fertilizer application to avoid applying before predicted rainfall events.
- Monitor the nutrient content of the soil to reduce fertilizer applications.
- Account for nutrient content of unharvested plant material to reduce fertilizer applications.
- Rinse and dispose of chemical containers safely.
- Manage soil health to improve water and nutrient retention and reduce leaching.

Practices to Reduce/Eliminate Pesticides from Entering Surface Water or Groundwater

- Reduce/eliminate irrigation discharge Reduce/eliminate stormwater discharge.
- Plant cover crops; use them and manage them appropriately.
- Manage irrigation, examples include:
 - Irrigation distribution uniformity.
 - Reduce irrigation water applied.
 - Use micro-irrigation.
 - Maintain irrigation system; check for leaks and broken emitters, and fix/replace as needed.
 - Install buffer strip, vegetated filter strip, or swale.
- Install constructed wetlands or other vegetated treatment systems.
- Install backflow prevention devices.
- Apply pesticide per labeling directions (e.g., do not apply during windy conditions, do not apply right before forecasted rain, do not irrigate directly after pesticide application, apply lowest dose, apply based on infestation thresholds).
- Use an IPM strategy.
- Install appropriate storage of chemicals, if kept on site.
- Install hedgerows.
- Use beneficial insects to reduce pesticide applications.
- Scout for pests prior to pesticide applications.
- Minimize deep percolation.
- Reduce pesticide applications.
- No dormant spray.
- Spot-treat infestations.
- Rinse and dispose of chemical containers safely.

Practices to Reduce/Control Erosion and Discharge of Sediment to Surface Waters

- Reduce/eliminate irrigation discharge Reduce/eliminate stormwater discharge.
- Plant cover crops; use them and manage them appropriately.
- Install buffer strip, vegetated filter strip, or swale Install constructed wetlands or other vegetated treatment system.
- Minimize bare soil.
- Limit movement of water to surface waters.
- Minimize tillage.
- Install and maintain sediment trapping measures.
- Conservation tillage.
- Conservation cover.
- Critical area planting.
- Mulching.
- Contour farming or strip-cropping.
- Contour buffer strips.
- Terrace.
- Avoid fall tillage.
- Properly construct and maintain roads.
- Out-slope roads.

Practices to Control Impacts to Stream Temperature

- Re-establish (and/or preserve) riparian buffers.
- Expand riparian and wetland buffers.
- Increase riparian and in-channel tree canopy for surface waters to support beneficial uses.
- Establish native species (grasses, forbs, legumes, shrubs, and trees) near riparian areas.
- Exclude people and vehicles from an area to protect, maintain, or improve the quantity and quality of riparian vegetation.
- Plant native vegetation to increase shade in accordance with site-specific potential.
- Limit riparian grazing to allow natural succession of riparian vegetation.
- Fence riparian areas or use GPS collars to prevent over-grazing or riparian areas.

Also refer to [USEPA National Management Measures to Control Nonpoint Source Pollution from Agriculture](https://www.epa.gov/nps/national-management-measures-control-nonpoint-source-pollution-agriculture) (<https://www.epa.gov/nps/national-management-measures-control-nonpoint-source-pollution-agriculture>).

ATTACHMENT C: Siskiyou County General Plan and Scott Valley Area Plan - Goals and Policies Relevant to the Proposed Project

Table 1. Siskiyou County Conservation, Open Space, and Land Use General Plan Policies

POLICY	PROJECT COMPLIANCE
Policy 36.1 Only agricultural Use are permitted on prime agricultural land.	The Scott and Shasta Order does not require a conversion of prime agricultural to non-agricultural use such as commercial or residential development. It may result in the conversion of a relatively minor amount of prime agricultural land to riparian vegetation, which may be used for compatible agriculture such as grazing.
Policies I.1 and I.4 Protect the physical environment, which now means that we must return it to its natural state insofar as possible and practical. Prevent pollution of water, air, and land.	The Scott and Shasta Order implements plans and policies designed to protect and restore water quality for all beneficial uses.
Policy H. Watershed and Water Recharge Levels. Recommendations 2. Continue to assure the high quality of water within the county with management programs for agricultural waters and emphasizing programs which stop intrusion of agricultural waste into the water supply. 3. Every precaution must be maintained to eliminate the danger of any pollution to the streams and lake as well as recharge areas through human and industrial and agricultural runoff.	The Scott and Shasta Order will regulate Commercial Agricultural Operations to prevent and minimize the discharge of wastes to surface waters and groundwaters including pesticides, nutrients, sediment, and heat loads.

Table 2 Scott Valley Area Plan – Natural Resources – Policies and Objectives

Draft Environmental Impact Report
Attachment C: Siskiyou County General Plan
And Scott Valley Area Plan Goals and Policies

POLICY	PROJECT COMPLIANCE
Policy#1 Only agricultural and public uses are permitted on prime agricultural soils. The primary objective of this policy is to only allow land uses which are compatible with the watershed's number one economy and to not permit a density which will destroy the land base critical to the agricultural economy.	The Scott and Shasta Order does not require a conversion of land with prime agricultural soils to non-agricultural uses such as commercial or residential development. It may result in the conversion of a relatively minor amount of land with prime agricultural soils to riparian vegetation, which may be used for compatible agriculture such as livestock grazing.
Policy#6 In all critical deer wintering areas, only agricultural, residential, open space, small scale commercial, industrial, recreational uses or quasi public uses may be permitted.	Compliance with the Scott and Shasta Order does not require land uses incompatible with the policy.
Policy#9 Within flood areas, only agricultural, residential, open space, small scale commercial, industrial, recreational uses and quasi public uses may be permitted.	Compliance with the Scott and Shasta Order does not require land uses incompatible with the policy.

ATTACHMENT D: Special Status Species

Special-status species with California Natural Diversity Database occurrence records in the Scott River and Shasta River watersheds. Riparian and wetland associations reflect whether the CNDDB population extent polygon intersects the referenced hydrographic or wetland dataset, as described in the Table Notes below.

Table 1 Special Status Species

Species Name	Common Name	Taxon	In Riparian Area	In Wetlands	CNDDB Records	CEQA Categories
<i>Actinemys marmorata</i>	northwestern pond turtle	Reptiles	Yes	Yes	8	FPT
<i>Antigone canadensis tabida</i>	greater sandhill crane	Birds	Yes	Yes	24	ST
<i>Bombus crotchii</i>	Crotch's bumble bee	Insects	Yes	Yes	5	SC
<i>Bombus franklini</i>	Franklin's bumble bee	Insects	Yes	Yes	1	FE; SC
<i>Bombus occidentalis</i>	western bumble bee	Insects	Yes	Yes	5	SC
<i>Buteo swainsoni</i>	Swainson's hawk	Birds	No	No	5	ST
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	Birds	Yes	Yes	1	FT; SE
<i>Plethodon asupak</i>	Scott Bar salamander	Amphibians	Yes	Yes	1	ST
<i>Rana cascadae</i>	Cascades frog	Amphibians	Yes	Yes	2	SC
<i>Riparia riparia</i>	bank swallow	Birds	Yes	Yes	11	ST

Status Code Legend

Federal (Endangered Species Act)

- FE** = Federally Endangered
- FT** = Federally Threatened
- FPE** = Federally Proposed Endangered
- FPT** = Federally Proposed Threatened
- FD** = Federally Delisted (retains State listing)

State (California Endangered Species Act / Native Plant Protection Act)

- SE** = State Endangered
- ST** = State Threatened
- SC** = State Candidate for listing as Endangered
- SR** = State Rare

Table Notes

1. **Source.** California Department of Fish and Wildlife, California Natural Diversity Database (CNDDDB). Species Name, Common Name, and Taxon correspond to the CNDDDB sname, cname, and taxongroup fields.
2. **Record count.** “CNDDDB Records” is the total number of CNDDDB records for the species across the Scott River and Shasta River watersheds combined, and is a measure of documented record density, not of population size or abundance.
3. **Riparian association.** “In Riparian Area” indicates that the CNDDDB population extent polygon intersects a U.S. Geological Survey National Hydrography Dataset (NHD) flowline at 1:100,000 resolution.
4. **Wetland association.** “In Wetlands” indicates that the CNDDDB population extent polygon intersects a National Wetlands Inventory (NWI) non-riverine wetland polygon. Riverine wetland polygons are excluded from this determination to avoid characterizing the stream channel itself as a wetland; those features are captured by the riparian determination in Note 3.
5. **Listing status.** Federal and State listing categories are current as of the CNDDDB query date and are subject to change. A species shown as Federally Delisted remains protected under the California Endangered Species Act where a State listing is also shown.

ATTACHMENT E: Estimated Cost of Compliance

Permit Fees

The State Water Resources Control Board (SWRCB) sets the fee schedule for irrigated lands regulatory programs throughout the state, as specified in California Code of Regulations, title 23, section 2200.6. All enrolled Vineyard Properties must pay the SWRCB fees on an annual basis. Although the SWRCB fees may change from year to year, the fee categories/schedule for the 2025-2026 fiscal year is shown below.

If a discharger is a member of a group that has been approved by the Regional Board or Regional Board Executive Officer to manage fee collection and payment, then the annual fee shall be \$1.50 per acre.

If a discharger is not a member of a group that has been approved by the Regional Board or Regional Board Executive Officer to manage fee collection and payment, then the annual fee shall be: \$37.40 per acre up to 300 acres plus \$18.71 per acre over 300 acres with a minimum fee of \$710.

The North Coast Water Board anticipates the vast majority of Irrigated Lands enrolled under the Order will choose to participate as a member of a group (i.e., Third-Party Program) that has been approved by the North Coast Water Board or Executive Officer to manage fee collection and payment.

Compliance with Water Quality Protection Requirements

Owner and operators of Irrigated Lands must comply with requirements to implement and adapt management practices including the Conditional Tailwater Prohibition, Sediment and Erosion Controls, and Streamside Area requirements. Enrollees are provided flexibility in selecting management practices and are required to monitor, and report on, their discharges and the management practices they are implementing to manage their discharges.

Enrollees may be required to implement improved or additional management practices, as necessary, and report on the water quality-related outcomes of their management practice implementation. Enrollees must ultimately implement management practices that result in compliance with the Order.

Management practices associated with irrigation and nutrient management, streamside areas, pesticide management, and sediment and erosion control management are already being implemented by many Enrollees. This may be due to actions taken to obtain coverage under the Scott and Shasta Conditional Waivers or requirements imposed by other regulatory agencies (e.g., pesticide tracking and reporting by the Department of Pesticide Regulation and Agricultural Commissioners) and through long standing voluntary conservation programs.

Implementation of management practices may also have direct net cost benefits to owner and operators of Irrigated Lands (e.g., irrigation and nutrient management result

in higher crop yields and less fertilizer and irrigation costs). For example, reducing the amount of irrigated water applied can reduce Irrigated Land owner or operator costs.

The Natural Resource Conservation Service (NRCS) has developed standard agricultural management practices to address irrigation and nutrient management, pesticide management, and sediment and erosion control management, some of the more common of which are discussed below. Implementation of many of these practices would result in compliance with multiple requirements of the Order. Table 1 provides estimated costs of management practices/scenarios Dischargers may implement to meet the requirements in the Order, as reported by the U.S. Department of Agriculture (USDA), NRCS¹.

Conservation Cover – involves establishing and maintaining a permanent vegetative cover on lands that are either not currently in use/production or lands currently in production that would be taken out of production. The practice does not apply to plantings for forage production or to critical area plantings. This practice can be applied on a portion of the field. The Conservation Cover practice may be implemented to reduce erosion and sedimentation and reduce associated groundwater and surface water quality degradation by nutrients and sediment, as well as other purposes. Costs range between \$200 and \$300 per acre.

Contour Buffer Strips – involves establishing narrow strips of permanent, herbaceous vegetative cover around hill slopes, which are alternated down the slope with wider cropped strips that are farmed on the contour. This practice may be implemented to reduce erosion and associated water quality degradation from the transport of sediment and other water-borne contaminants downslope. Costs range between \$300 to \$400 per acre.

Cover Crop – involves planting grasses, legumes, and/or forbs for seasonal vegetative cover. The practice may be implemented to reduce erosion, maintain or increase soil health and organic matter content, reduce water quality degradation by utilizing excessive soil nutrients, or for other purposes. Costs range between \$100 to \$300 per acre.

Filter Strip – involves establishing a strip or area of herbaceous vegetation that removes contaminants from overland flow. Filter strips can be established anywhere environmentally sensitive areas need to be protected from sediment, or other suspended solids, and dissolved contaminants in runoff. Costs range between \$200 to \$300 per acre

Integrated Pest Management (IPM) program – involves implementing a site-specific combination of pest prevention, pest avoidance, pest monitoring, and pest suppression strategies. An IPM approach seeks to prevent or mitigate offsite pesticide risks to water

¹ [USDA Natural Resource Conservation Service California Practice Scenarios 2023](https://www.nrcs.usda.gov/sites/default/files/2022-11/California-Scenarios-23-payment-rates.pdf)
(<https://www.nrcs.usda.gov/sites/default/files/2022-11/California-Scenarios-23-payment-rates.pdf>)

quality from leaching, solution runoff and adsorbed runoff losses; and prevent or mitigate on-site pesticide risks to pollinators and other beneficial species through direct contact; among other goals. Costs range between \$50 and \$100 per acre.

Center Pivot Irrigation System – involves implementation of a low-pressure center pivot irrigation system that provides for high efficiency (>85%) application (e.g., as drops, tiny streams, or miniature spray through emitters or applicators). The irrigation system has a coefficient of uniformity above 85% and irrigation water is efficiently applied to maintain adequate soil water for the desired level of plant growth. Field runoff is eliminated. Costs range between \$130,000 to \$160,000 for a typical system irrigating a 160-acre field.

Nutrient Management (NM) – involves managing the amount (rate), source, placement (method of application), and timing of plant nutrients and soil amendments. The practice is implemented to minimize agricultural nonpoint source pollution of surface waters and groundwater, among other reasons. Costs associated with this practice include soil testing, analysis, and implementation of the NM plan and recordkeeping. Costs range between \$10 and \$320 per acre.

Riparian Vegetation Buffer – involves establishment of an area of predominantly trees and/or shrubs located adjacent to and up-gradient from waterbodies. The practice may be implemented to reduce excess amounts of sediment, organic material, nutrients and pesticides in surface runoff and reduce excess nutrients and other chemicals in shallow groundwater flow; reduce pesticide drift entering the waterbody; restore riparian plant communities; create shade to lower or maintain water temperatures to improve habitat for aquatic organisms; or to provide other benefits. Costs vary based on whether riparian forest buffer vegetation is established through seeding, cuttings, bare-root plantings, or small or large containers. For scenarios where land is taken out of production to establish the riparian vegetation buffer, foregone income is considered. Costs range between \$3,000 to \$5,500 per acre.

Tailwater Control Basin – involves constructing a basin with an engineered outlet, formed by excavating a dugout, constructing an embankment, or a combination of both. The purpose of the tailwater control basin is to capture and detain/retain tailwater for a sufficient length of time to allow it to cool and/or infiltrate to groundwater. Costs are estimated between \$50,000 to \$60,000 per basin.

These potential costs were considered when the water quality protection requirements were developed for the Order.

Table 1: Estimated Costs of Management Practices/Scenarios for Water Quality Protection

Management Practice	Scenario Size	Unit Cost	Total Cost (low)	Total Cost (High)
Conservation Cover (327)	50 acres	\$200-\$300/acre	\$10,000	\$15,000
Contour Buffer Strip (332)	1 acre	\$300-\$400/acre	\$300	\$400
Cover Crop (340)	40 acres	\$100-\$300/acre	\$4,000	\$12,000
Filter Strip (393)	1 acre	\$200-\$300/acre	\$200	\$300
Integrated Pest Management (IPM) program (595)	40 acres	\$50-\$100/acre	\$2000	\$4,000
Center Pivot with Low Pressure Drop Sprinklers (442)	1,300 linear feet	\$100-\$120/linear foot	\$130,000	\$156,000
Nutrient Management (590)	40 acres	\$10-\$320/acre	\$400	\$12,800
Riparian Vegetation Buffer (391)	1.5 acres	\$3,000-\$5,000/acre	\$4,500	\$7,500
Tailwater Retention/Detention Basin (447)	25,000 cu. yd. basin	\$2.0-\$2.5/cu. yd.	\$50,500	\$62,000
Tailwater Recovery and Reuse System (447,607,553)	25 irrigated acres	\$300-\$400/acre	\$75,000	\$100,000
Tailwater Treatment Wetlands (656)	1 acre	\$15,000-\$20,000/acre	\$15,000	\$20,000

Compliance with Agricultural Road Storm-Proofing Requirements

Dischargers with appurtenant agricultural roads must comply with requirements to implement road storm-proofing management practices. Existing Irrigated Lands are provided a compliance schedule (10 years from the enrollment deadline) to complete implementation of road storm-proofing management practices.

Dischargers are required to inspect appurtenant agricultural road networks following qualifying storm events and are required to implement improved or additional management practices, as necessary. Dischargers must ultimately implement management practices that result in compliance with the Order.

Management practices associated with road storm-proofing are already being implemented by many dischargers. This may be due to requirements imposed by other regulatory agencies (e.g., existing County grading and drainage requirements) and through long standing voluntary conservation programs.

Implementation of road storm-proofing management practices may also have direct net cost benefits to Irrigated Lands (e.g., reduced road maintenance costs costs).

The Natural Resource Conservation Service (NRCS) has developed standard management practices for agricultural road sediment, erosion, and drainage control, some of the more common of which are discussed below. Implementation of many of these practices would result in compliance with multiple requirements of the Order. Table 2 shows costs of management practices/scenarios Dischargers may implement to meet the requirements in the Order, as reported by the U.S. Department of Agriculture (USDA), NRCS² and adjusted by Regional Water Board staff for anticipated scenarios.

Rolling Dips - Shallow, rounded dip in the road where road grade reverses for a short distance and surface runoff is directed in the dip or trough to the outside or inside of the road. Rolling dips are drainage structures used primarily on gravel surfaced, out-sloped roads designed to drain the road surface and constructed to remain effective while allowing passage of motor vehicles at normal or slightly reduced road speed. Costs are estimated between \$10 to \$20 per lineal foot.

Critical Dips - A dip in the roadbed at a culverted stream crossing, preferably at the down-road hinge line of the fill, that prevents stream diversion. The dip is designed to act as an overflow structure if the main culvert were to plug and ponded water overtopped the fill. Although somewhat like a rolling dip, it must have sufficient capacity (width and depth) to carry flood flows from the stream without itself overtopping and diverting down the road. Cost is estimated at \$10 to \$20 per lineal foot.

Out-sloping - Converting an in-sloped road to an out-sloped road. Out-sloping can also refer to the act of excavating the fill along the outside of the road and placing and grading it against the cut-bank, thereby creating an out-sloped surface where the roadbed once existed. In road decommissioning, partial or full out-sloping (recontouring) are two methods for providing permanent drainage dispersal from the former roadbed. Cost is estimated at \$3 to \$30 per lineal foot.

These potential costs were considered when the appurtenant agricultural road storm-proofing requirements were developed for the Order.

Table 2: Estimated Costs of Management Practices/Scenarios for Road Storm-proofing

² [USDA Natural Resource Conservation Service California Practice Scenarios 2023](https://www.nrcs.usda.gov/sites/default/files/2022-11/California-Scenarios-23-payment-rates.pdf) (https://www.nrcs.usda.gov/sites/default/files/2022-11/California-Scenarios-23-payment-rates.pdf).

Draft Environmental Impact Report
Attachment E: Estimated Cost of Compliance

Management Practice	Scenario Size	Unit Cost	Total Cost (low)	Total Cost (High)
Rolling Dip	1,000 feet	\$10-20/ft	\$10,000	\$20,000
Critical Dip	1,000 feet	\$10-20/ft	\$10,000	\$20,000
Road Out-sloping	5,000 feet	\$3-\$30/ft	\$15,000	\$150,000

Monitoring and Reporting

All Enrollees are required to conduct monitoring and reporting either individually or as part of a Coalition effort. All Enrollees are required to report management practice implementation annually in their Farm Evaluation.

Table 3: Estimated Cost of Required Monitoring

Required Monitoring	Unit Size	Cost per Sampling Event (Analytical + Materials and Labor) per unit
Representative Groundwater Monitoring	Per well	\$300
Drinking Water Well Sampling	Per well	\$150

Table 4: Estimated Cost of Conditional Monitoring

Required Monitoring	Unit Size	Cost per Sampling Event* (Analytical + Materials and Labor) per unit
Riparian Photo-Point Monitoring	Per Grazing Event	\$200
Tailwater Monitoring (continuous temperature monitoring)	Point of Compliance	\$1,000 *cost estimate for temperature monitoring is calculated over the Irrigation Season rather than for a single irrigation set,
Tailwater Monitoring (TKN or TP grab samples)	Point of Compliance	\$250

Technical Reports and Planning Documents

As part of Order compliance, Individual Enrollees and Coalitions on behalf of their enrolled members are required to submit an Annual Compliance Report which includes annual management practice reporting and annual water quality monitoring results. For Enrollees with parcels in the Tailwater Adaptive Management Program, the Order requires additional planning documents such as Certified Tailwater Treatment and Control Plans and Certified Tailwater Elimination Plans. Enrollees may also elect to develop and implement Grazing and Riparian Management Plans in lieu of meeting certain livestock grazing requirements in Streamside Areas. Cost estimates of Technical Reports and Planning Documents are provided below:

- a) Representative Groundwater Monitoring Workplan (Individual): Individual Enrollees shall submit a Water Quality Monitoring Workplan (Workplan) to the Executive Officer describing how they will implement the water quality monitoring and reporting requirements of this Order as detailed in Attachment A. Estimated cost (one-time): \$1,000–\$2,000.
- b) Representative Groundwater Monitoring Workplan (Coalition): The Coalition shall submit a Workplan to the Executive Officer for approval that proposes a groundwater trend monitoring network, and describes how the Coalition will meet all group monitoring requirements on behalf of Enrollees. Estimated cost (one-time): \$25,000–\$50,000.
- c) Annual Farm Evaluation: inventories the management practices currently implemented on all enrolled parcels, documents compliance with this Order, and identifies changes in operations or management from prior years. Estimated annual cost is \$250 for Individual Enrollees and \$20,000 for the Coalition on behalf of its enrolled members.
- b) Annual Monitoring Report: presents monitoring data collected pursuant to this Order during the prior calendar year, including associated analyses and any Source Determination Reports required under Attachment A: MRP. Estimated annual cost is \$1,000 for Individual Enrollees and \$20,000 for the Coalition on behalf of its enrolled members.
- c) Grazing and Riparian Management Plan: Enrollees electing to developing a GRMP in lieu of meeting certain livestock grazing requirements in Streamside Areas shall develop and implement a Grazing and Riparian Management Plan certified by a Qualified Professional. Estimated cost (per GRMP): \$3,000–\$8,000.
- d) Certified Tailwater Elimination Plan or Certified Tailwater Discharge Treatment and Control Plan (Pathway 1 or Tier 2 Pathway 2 Enrollees): Enrollees with tailwater discharges electing Pathway 1 or triggering Tier 2 adaptive

Draft Environmental Impact Report
Attachment E: Estimated Cost of Compliance

management shall develop the applicable Plan certified by a Qualified Professional. Estimated cost (per Plan): \$5,000–\$15,000.

